

SIEMENS STRATEGY TO HAVE A LEAP GROWTH ON IN-VITRO DIAGNOSTIC (IVD) BUSINESS IN INDONESIA

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Abstract - *Healthcare Diagnostic Industry in Indonesia is showing promising growth by the time. As one of the emerging countries that have the largest population in South East Asia that makes Indonesia is categorized as second wave emerging countries. Healthcare Diagnostic is one of the business divisions of Healthcare Sector PT. Siemens Indonesia. The potential, unique business behavior and niche market attracts management's attention to seriously develop the business since PT. Siemens Indonesia as principal was handing over the business on 2011. Division of healthcare diagnostic has officially become a division of PT. Siemens Indonesia – Healthcare Sector in 2011. Grow the business on a leap is the main target from handing over business process to Siemens Indonesia. Therefore, it required accurate business strategy to meet the demand and to compete with competitors so that Siemens could develop and achieve the growth on a “leap”. To determine the precise business strategy, the writer will require strategic analysis that includes external and internal. Business strategy developed should be derived down to business model and business tactic to give detail description of the steps taken and determine percentage numbers of “leap” growth to be achieved within five years from the implementation of the business strategy.*

Keywords: *business strategy, leap growth, market analysis.*

I. INTRODUCTION

In-vitro (IVD) diagnostic is the product that tests blood, urine, and other human body fluids to give the result of one's health condition. The equipment ran the test with the reagents, inside the reagents the blood, urine and other human body fluids of patient are tested (sample). The brand of the reagents must be same with the brand of the analyzing equipment.

In-vivo (Latin for “within the living”) is the experimentation using a whole living organism as opposed to a partial or dead organism (Wikipedia, ca 2012). Imaging modalities have long been crucial to the researcher in observing changes either at the organ tissues, cells, or molecular level, in human responding to physiological or environmental changes. In-vivo diagnostic is facilitating the test of human body condition with the participation of the body it selves by using the medical equipment within techniques. The techniques such as: Magnetic Resonance Imaging (MRI), Computed

Tomography (CT), Ultrasound Sonography (USG), Positron Emission Tomography (PET), and others.

Healthcare in-vitro diagnostic (IVD) will have a strong growth in the future. The forecast of growth will be 11.57% for every year up to 2016 (Clearstate Data, 2011). The potential growth of healthcare industry has been fully supported by Indonesian Government. It can be shown by increasing the amount of state budget on healthcare sector in order to facilitate more the citizens. More and more government hospitals are built in the sub-urban. Even though there is a subsidy from government; the procurement of hospital equipment is on tight competition in terms of quality and price. Therefore the big players on the healthcare equipment feel that the competition is going to be more competitive in the future. Nevertheless Indonesia has average annual Gross Domestic Product (GDP) growth from 2000 and 2011 of 5.27% and the projection of growth will remain strong along the coming years. Combined with a population of 260

million, this makes Indonesia a very potential country to develop consumables business. This paper will analyze Siemens key strategic issue in the IVD business and recommend changes and strategies to have a leap growth in Indonesia's IVD business. In the year of 2011, Siemens HDX division was having three percent of growth and expected to have double digit growth for the coming years.

II. BUSINESS ISSUE EXPLORATION

In this section, the writer will analyze Siemens HDX current strategic position by evaluating some key strategic factors, such as: external analysis, internal analysis. From those two analysis, the business strategy will be made and derived down into business model and business tactics. To show the result on business tactics execution, percentage of growth will be determined.

A. External Analysis

The tools of PEST (Political, Economic, Social and Technology) Analysis, 5 forces of Porter, competitor analysis, 4 P marketing mix, strength and weakness analysis, and market analysis will include on this section. Data of the market are provided by Clear State Pte Ltd. Clear State Pte Ltd is the economist intelligence unit focusing on healthcare industry. Market data of Indonesia had been given for the year 2011. Clear State data also give the projection (forecast) of the business growth for next 5 years up to 2016. These data are important to analyze current company position and also to inform the competitor position as well. The output of analysis will help in determining the formulation of business strategy.

PEST Analysis



Figure 1. PEST Analysis on Healthcare Industry

Five forces of Porter Analysis

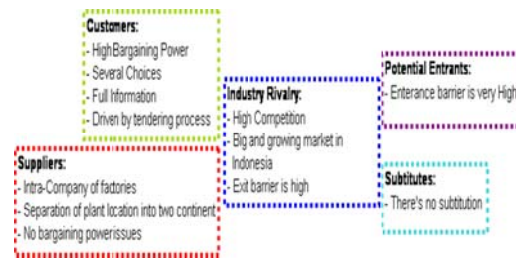


Figure 2. Five forces of porter: Siemens Healthcare IVD

Competitor Analysis

Area	Points
Strengths	Strong Brand Images
	More technology features offered on instrument specification
	High efficiency for reagents and consumables usage
	More fresh condition of reagents and consumables
	On time and quick delivery by using Air Freight
Weaknesses	Higher price on instrument
	Key points regarding test volume, sample test/hour
	Zero tolerance with compliance issue

Table 1. Siemens Strength and Weakness Matrix.

Market Analysis

Siemens HDX Market Positioning								
Product Group	Total Market Share (ICR - BI) 2011	Rank						
		1	2	3	4	5	6	7 - inf
CAI	367,30	Roche	Abbott	Siemens	BioMerieux	Human	J&J	Others
%		31,40%	13,80%	8,20%	8,80%	8,80%	2,70%	25,40%
Amount (ICR - BI)		121,8	52,8	35,5	34,5	33,9	10,8	98,80
HHS	203,00	Abbott	Symex	BioMerieux	Stago	Horiba	Siemens	Others
%		29,60%	21,80%	16,30%	4,90%	4,10%	3,90%	20,40%
Amount		59,9	45,8	34,1	10,2	8,5	8,1	42,60
MM	61,50	BioMerieux	Roche	BD	Siemens	Hemabrew	Abbott	Others
%		22,00%	20,00%	17,60%	8,80%	2,80%	0,60%	30,40%
Amount		15,3	13,9	12,2	4,7	1,8	0,4	21,20
POC	81,90	Roche	Siemens	Nova	Radiometer	Axis Shield	Abbott	Others
%		35,80%	13,10%	11,00%	9,50%	5,70%	3,00%	21,90%
Amount		29,7	10,9	9,1	7,9	4,7	2,5	18,10
Total	746,20							

Table 2. Siemens HDX Market Positioning

Siemens position on the market on 2011 was on number fourth (in total), looking on the Siemens position on each segment in the market shown on table 2 above. The 4 segment is being divided based on class therapy tests. There are CAI; chemistry and immunoassay. HHS; hematology, infectious disease, plasma protein and drug testing system. MM; microbiology and molecular testing system. And POC; blood-gas, urine, diabetic and cardiac tests).

Clearstate data has also given the forecast number of market growth up to 2016. As shown on above data the market growth projected in average 11.52%.

B. Internal Analysis

In analyzing internal competitive advantage of Siemens Indonesia healthcare diagnostic division (HDX division), there are three foundations that will be described. There are resources, capabilities and core competencies. The analysis will give big picture and breakdown list of internal factors that Siemens Indonesia have and also to reflect the current internal condition.

Tangible Resources Analysis

Financial Resources	<ul style="list-style-type: none"> • Strong capital support from headquarters.
Organizational Resources	<ul style="list-style-type: none"> • Periodic report • Forecast, budget and monitor the numbers of business along the period • Lean management structure
Physical Resources	<ul style="list-style-type: none"> • Two big plants that being separated in two continents (America and Europe).
Technological Resources	<ul style="list-style-type: none"> • 8600 invention and 53.300 patents granted as of 2011. • Complete diagnosis treatment of in-vivo and in-vitro diagnostic.

Table 3. Tangible Resources of Siemens HDX Indonesia

Intangible Resources Analysis

Human Resources	<ul style="list-style-type: none"> • Total headcount = 7 people with different function areas.
Innovation Resources	<ul style="list-style-type: none"> • Siemens product will keep develop.
Reputational Resources	<ul style="list-style-type: none"> • The winner of customer relationship management on 2011 in ASEAN – Pacific.

Table 4. Intangible Resources of Siemens HDX Indonesia

Capabilities Analysis

Functional Areas	Capabilities
Distribution	Implementation of drop ship method
Human Resources	Educating, motivating and retaining employees
Management Information System	Using SAP R3 custom built specifically for Siemens

Table 5. Capabilities of Siemens HDX Indonesia

Core Competencies

“Innovation is our lifeblood” is the strong motto on the Siemens Global that put the company core competencies is on innovation. Advance in technology is the main key of Siemens to be a big player in the market. The industry is also pushing the trends in how company providing the advance and sophisticated technology for users so that the

result of patient diagnose could be more accurate effectively and efficiently.

III. BUSINESS SOLUTION

A. Current situation analysis as the number 4th on the market

Far away before Siemens acquired Dade Behring AG, Bayer Diagnostic AG and DPC Ltd (before 2007), the current local company that exists are representing each of the three companies acquired. PT. Setia Guna Medika was representing Bayer Diagnostic, PT. Behrindo Nusaperkasa was representing Dade Behring and PT. Karindo was representing DPC. The penetration and business strategy had been done by them self and it is not a common story that they fighting each other inside the market.

In early 2009, Indonesia Government has effectively implementing INSW on import-export regulation. Means the export and import activity on the product must be done by principal companies. Siemens Healthcare Diagnostic product must be proceed and imported by Siemens Indonesia. PT. Tawada Healthcare that has been a strong dealer for in-vivo products has been appointed as sole distributor of in-vitro diagnostic product as well.

The business need to continue, therefore Siemens Indonesia has being appointed as intra companies to support parties that will handle ordering process in Indonesia. At other side, the sales and marketing activities remain to be done by Siemens Healthcare Diagnostic Hongkong.

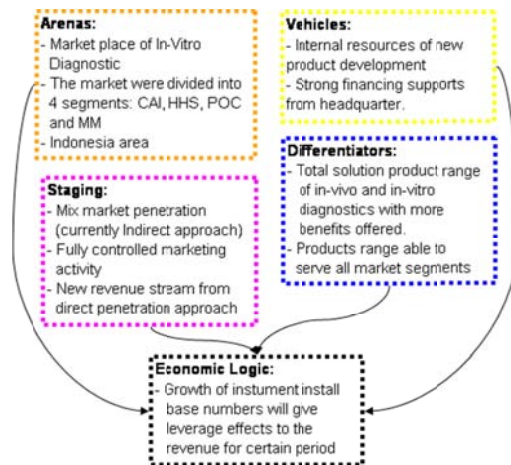
B. From Strategy to Models and to Tactics

Business model refers to the logic of firm, the way it operates and how it creates value for its stakeholders. Strategy refers to the choice of business model through which the firm will compete in the market place. Tactics refer to the residual choices open to a firm by virtue of the business model that it employs (Casadesus R, Masanell, Ricart J.E, 2009)

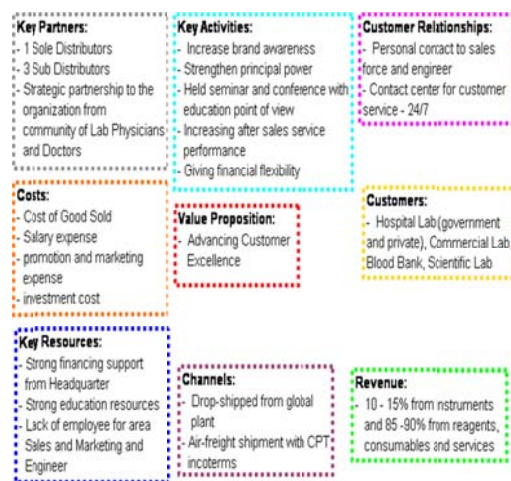
In order to achieve the goals to have a leap growth, Siemens need to set the business model to shown the way it operates and

creates values for stakeholders and based on that, the strategy elements will be set to compete in the market place and the last is on defining business tactics to show best actions in order to achieve the goals.

Business Strategy



Business Model



Business tactics to enhance the instrument install base numbers

The structure of revenue is showing the 10 – 15% of revenue was come from Instrument and 85 – 90% revenue has come from reagents/consumables/services.

The significance of reagent and consumables contribution that give significant leverage of total revenue has made the growth of install base number is important.

In order to be a market leader, companies must choose among one of three fundamental: product leadership, operational

excellence and customer intimacy. Learns to discipline and get used to mediocre market performance and to playing competitive catch-up continuously. Choose your customers, narrow your focus, and dominate your market (Treacy, M. Wiersema, F., 1997).

Siemens is not targeting as market leader in the next five years due the new process of handing over the business but Siemens is targeting to have a leap growth on the business. Being a market leader will set for long term plan. Therefore, the business tactics will take market leader disciplinary of “customer intimacy”. Writers conduct the interview with competitor sales force and internal distributor sales force to digging the information on what is the critical factors and the needs on contributing the customer decision to purchase the laboratory equipment. Base on the information being obtained. Writers will set the business tactics into three sections below.

Enhance the Brand awareness with principal power existence Since Siemens Indonesia has handing over the business in 2011. Means to play role as principal in the market is a must. The existing of brand awareness in Indonesia healthcare industry, especially in world of in vivo diagnostics must be contagious to the in vitro diagnostic world.

Siemens Indonesia as principal must use its power to do several activities below to enhance the brand awareness to customers:

- Focused on campaign “Total Solution” concept

The main purpose of Siemens on acquiring 3 major companies on in vitro diagnostic industry is to make “total solution” concept. As described on figure III.7, In-vivo and In-vitro diagnostic could complete and support each other in every step of patient care. Siemens can give the diagnostic solution to patient in one hospital as total whole solution and be the first fully integrated global diagnostic company.

By using total solution concept, the hospitals also could use the integration of HIS and LIS. As mentioned in the section of technology analysis, Hospital will have the information management and integrated data of test, patient information, tests order

information and other data that could describe patient health condition between instruments.

- Organize some conferences, seminars and events to laboratory physicians (customer and potential customer) with periodically time containing: Education on new approach / method of tests
- New product launch
- Customer appreciation day

Enhance Customer service (after-sales) performance and reputation During after-sales service process, PT. Tawada Healthcare have taken care the process to end customers under the business division of Bio Medical Service. End customer is using web base application to input service/complaint report and report it to PT. Tawada Healthcare. This application is fully controlled and monitored by regional office.

Multi stage of process problem-solving as described is making slow the after sales services performance. Even there's no hard complain from end customer due to the current service performance but when taking care the instrument with seeding program will demand Siemens Indonesia to take care the instrument intensively as their assets.

New model proposed is needed. Therefore, Siemens Indonesia must have engineer team on the level 2 (L2) to monitor and control the process of after-sales service. The communication and escalation will do on country level in purpose to shorten the process flow.

All job function that had taken care by regional office – technical solution service is being reassigned to Siemens Indonesia engineer. Not only supporting the activity of L1 service, the field inspection also could be done by which the team and it will give the contribution to the performance speed and indirectly give impact to the reputation and brand awareness

Price (financial flexibility)

Base on the market survey with interview, Siemens equipment selling price to hospital is higher compare to competitors, this also could be indicates from analysis of product features and retail price on section Product and Price analysis.

Siemens regional could support on discount for bundle purchase of instruments but it will not give results that Siemens will be the cheapest among competitors. Other strategy that could be use to avoid the price war with competitor is by a seeding program.

Seeding is marketing program that adopt the model from leasing method. There will be two models of seeding with differences of asset transfer ownership at the end of contract period. Commonly in accounting world it called capital lease and operation lease.

- Capital Lease

This method is offering free-instrument to the potential customer with variety of instrument needed and number of tests that generated in periodic. The step of implementing of this method shown below:

Making report of Historical test numbers that laboratory has. As shown on appendix B. From the historical data of test volume on laboratory, it is being converted to dollar amount and could show the estimation of historical revenue generated.

Making report of projection revenue. As shown on appendix C, the projection is being made with justification from its historical data and estimates the average growth for the coming years.

Making report of cash flow projection. As shown on appendix D, after knowing the revenue forecast that could be generated during the contract period. In this case is using 5 years contract, referring on common seeding contract program terms that applied in Siemens. The data could give information: the estimation when the investment could be paid-back (BEP) and shows the return that could be obtained each year.

The rate of return that used for calculation is calculated using WACC method. This seeding program method is way of investing. Therefore there will be factors need to be considered besides the interest rate of average corporate banking credit rate in Indonesia.

- Operation Lease

This method is an option for customers that have intend for acquiring Siemens IVD

equipment but collide with the amount that need to be invested. Operation lease will be calculated using the average interest rate from Corporate Bank in Indonesia and being set the installment within 5 years contract period.

C. Business Growth Projection

The install-based of equipment is the key-success factors on the growth of IVD business. Therefore, the projection of growth will use number of install base on hospital as the parameters. Numbers of revenue generated from laboratory will use the number from section (3.2.4.3.1 Seeding Program Model). The laboratory is being categorized as medium size laboratory.

With the average of 5 years reagent selling to medium size laboratory is USD 185.896 (IDR 1.640.239.754). The targeted growth rate will be determined with gradual increase from year 2012 up to 2016.

Business Growth Projection(summary)						
	YEAR 2011 (a)	YEAR 2012 (b)	YEAR 2013 (c)	YEAR 2014 (d)	YEAR 2015 (e)	YEAR 2016 (f)
Total Siemens Market Size	2,96%	8,06%	12,44%	17,70%	18,80%	22,15%

Previously when the business was driven from Siemens Healthcare Diagnostic Hongkong with representative office in Indonesia was used local company (distributor) the average of business growth targeted was on the range 3 – 5%. Since the business has been under PT. Siemens Indonesia – Healthcare Sector, the double digit growth is being expected from regional management.

With the business strategy execution, the targeted growth has being set. For year 2012, the growth was forecasted as much as 8.06% with target of addition 3 new laboratory install based. For the year 2013, the growth was forecasted as much as 12.44% with target of addition 5 new laboratory install based. For the year 2014, the growth was forecasted as much as 17.70% with target of addition 8 new laboratory install based. For the year 2015, the growth was forecasted as much as 18.80% with target of addition 10 new laboratory install based. For the year 2016, the growth was forecasted as much as 22.15% with target of addition 14 new laboratory install based.

IV. PROJECT IMPLEMENTATION AND EVALUATION

In order to do implementation plan effectively based on the business solution described, specific measurement must be made, activity plans must be considered, including its priority, budget and yearly time frame. The activities are:

A. Adding new customers install base by Brand awareness and principal power

- i. Breakdown list of matrix in-vivo and in-vitro customers and define the priority of new customers base on the size of laboratory. RSUD or famous private laboratory such as: Pramita Lab is important to penetrate first
- ii. Synergize the team with in-vivo sales team and distributors that selling in-vivo product to hospital in order to get the strategic approach to the key decision on the hospital board and team
- iii. Enhance the numbers of headcount that have product knowledge speciality to educate the customers for taking benefit of Siemens in-vitro diagnostic products with its elaboration benefit for using total solution concept that designed by Siemens Healthcare.
- iv. To ensure the distributors up to sub distributors to do the sales and marketing activity together and have the right tools to support the activity. The tools are including the presentation slide, strategic approached, reliable logistic (fulfillment the orders) and financing support from Siemens as principal.
- v. Held seminar and conference activities in perspective view of education on new approach / method of tests, article update on new finding in diagnostic laboratory world, and new product launch. Lab physicians and doctors from customers and potential customers being invited to this event
- vi. Held customer appreciation day once a year to build up the community among users and to appreciate for their trust on using Siemens IVD product

B. Increase customer service (after-sales) performance and reputation

- i. Hired experienced engineer that dedicated for L2 services at country Level. As mentioned in chapter III – business

solution. L2 engineer at country level will give quicker time escalation and could jump-in into the field for priority customer for indicating problem in equipment operations

- ii. Monitor and close the gap the service level to end customers and make progress report that could be submitted to Siemens management.

C. Finance flexibility options for customers

- i. Close working with Business Administrator team to calculate the investment project forecast per laboratory and hospital.
- ii. Get the history data input of new customers and make proper projection.

D. Strengthen partnership with distributors and sub-distributors

- i. Defining with clear the role of principal with distributor/sub distributor.
- ii. Monthly meeting to discuss sales-funnel.

After implementation has been described with its activities, next part is the project evaluation. Siemens Indonesia-Healthcare Sector management, especially the head of HDX division must be assigned to monitor the implementation of each activity plan mentioned above.

There are several things to monitor, such as:

- Budget expenditure.
- Activity Progress. S curve tools could be use to check the continuity of the project.
- Customer feedback.

V. RECOMMENDATION

Some recommendations regarding this final project are:

- Business development officer need to be appointed. This recommendation is proposed due to the head of division HDX also covering the position of head division HCP. This strategy must be implemented continuously and fully monitor. By having business development officer, it will be a center of competence and backup leader in terms of project execution
- Having more deep down feasibility studies on potential customer that will join seeding program as part of finance flexibility. The projection and calculation

of seeding project must be done in correct and proper way

- Fully commitment from country and regional top management must be obtained. This is a must in order to run the project smoothly by not having internal obstacle.
- There will be reactions from competitor due to the strategy execution. Therefore the strategy should by dynamics to anticipate it and in order to keep the performance stay in line.

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